The 1996 Rio Grande National Forest: What Needs to Change

- This document was circulated to the public following meetings held in March 2016.
- Comments were collected from the general public and from Forest Service employees and were incorporated into this document (Version 2).
- This document is draft and is designed to launch the proposed action development phase of the Rio Grande National Forest plan revision process.

Introduction

The current Land and Resource Management Plan (forest plan) for the Rio Grande National Forest is nearly 20 years old. Forest staff is currently in the process of developing a new plan that guides how it will be managed over the next 15 to 20 years. Recently completed assessment reports provide information on the current "state of the forest," including conditions, trends, and risks to sustainability. A product of an extensive public process, nearly 20 years of forest monitoring reports, and other available reports and data, these assessment reports are informed by the best available scientific information and provide guidance on what needs to change in the 1996 Forest Plan to ensure the sustainability and resiliency of resources, goods, and services on the Rio Grande National Forest. While we are not in a formal comment period and comments can be submitted at any time during the process, to be more helpful in informing the next phase of the process please submit comments by August 22, 2016. Please send comments to rgnf_forest_plan@fs.fed.us.

What is a Forest Plan?

A forest plan is the overarching direction for all management decisions and projects on the Rio Grande, constrained by law, regulation, and policy. Written as a snapshot in time and reflecting a philosophy of management from both the agency and the public, a forest plan helps define the management direction for the forest, literally lines drawn on the map, as well as the establishes desired conditions and related standards and guidelines for management priorities of those areas. A forest plan is also a physical, bound, three-volume publication that includes a Record of Decision, Final Environmental Impact Statement, and Appendices, and it is used daily as a reference guide and dog-eared on resource managers' and line officers' desks.

The current forest plan for the Rio Grande National Forest is available in hard copy at the Forest Service offices in La Jara, Monte Vista, Del Norte, and Saguache as well as on the website at http://www.fs.usda.gov/main/riogrande/landmanagement/planning.

Why a Need for Change Document?

To initiate the proposed action development phase of the revision process, the 2012 Planning Rule requires Forest Service staff to present a document to the public at the end of the assessment phase explaining what needs to be revised from the previous plan. This *Need for Change* document identifies the needs and desires to change the 1996 Forest Plan, as recommended during the assessment phase discussed above. Change criteria are described below, and the specific changes under consideration are identified in Tables A through D, which follow.

Table A. *Requirements in the forest plan revision process*

Many federal laws, regulations, and policies govern the work of forest staff every day. These requirements are *non-discretionary* for the forest supervisor, who is the deciding official in the revision process.

	Requirement	Basis for Requirement	What we did with what we heard (internal & external)
A1	Re-evaluate the suitability of forest lands for multiple uses, including areas for timber production, communication sites, over the snow vehicle use, mechanized and or/motorized travel, and utility corridors.	• National Forest Management Act • Multiple Use Sustained Yield Act • 2012 Planning Rule	The analysis will consider the suitability or non-suitability of lands based on the desired conditions and the inherent capability of the land to support the use. Suitability is not determined for every resource or activity; or for every acre of the plan area. Over-the-snow vehicle use was added in response to comments received in April.
A2	Conduct an inventory, evaluation, analysis, and recommended wilderness on the Rio Grande National Forest.	• Wilderness Act (1964) • 2012 Planning Rule, Chapter 70	Inventory, evaluation, analysis and recommendation process is described in FSH 1909.12, Chapter 70. The process is being implemented with thorough public involvement (Appendix A2)
A3	Conduct an inventory, evaluation, analysis, and recommend for inclusion in the Wild and Scenic Rivers System.	• Wild and Scenic Rivers Act • 2012 Planning Rule, Chapter 80	Inventory, evaluation, analysis and recommendation process is described in FSH 1909.12, Chapter 80. The process is being implemented on 23 segments not included in the analysis for the 1996 Forest Plan. (Appendix A3)
A4	Update direction to further promote the recovery and conservation of federally recognized threatened, endangered, proposed, and candidate species.	• Endangered Species Act • 2012 Planning Rule	The analysis will address all existing direction related to federally recognized species.
A5	Revise the 1996 Forest Plan to provide management direction to manage habitat to ensure viable populations of species of conservation concern.	• 2012 Planning Rule • Discussion in Assessment 5	Initial Proposal will include proposed species of conservation concern list from the Regional Forester. The analysis will consider a select set of key ecological conditions, and plan components related to the viability of the species of conservation concern known to occur on the

			forest. (hyperlink to draft list/letter as appendix A5)
A6	Revise the 1996 plan to incorporate management direction related to renewable energy. including reasonably foreseeable transmission corridors	• 2012 Planning Rule • Identification in Assessment 10, Energy and Minerals	The analysis will determine suitability for renewable energy resource development and accompanying plan components.
A7	Revise management direction related to climate change.	• 2012 Planning Rule	The analysis will consider ecosystem characteristics that may be vulnerable to climate change.
A8	Consider goals and objectives of the Forest Service strategic plan.	• 2012 Planning Rule	The Revised Plan will consider the broad goals and objectives of the USDA Forest Service Strategic Plan: FY 2015-2020.
A9	Develop sustainable management direction for current and future recreation uses.	• 2012 Planning Rule • Identified in Assessment 9, Recreation	The Initial Proposal will develop plan components related to sustainable recreation management on the RGNF. (Draft standards in process)
A10	Forest plans must identify priority watersheds for maintenance and restoration. The Forest Service National Watershed Condition Framework must be used in plan revisions.	• 2012 Planning Rule • Identification in Assessments 1 and 2 • Internal staff recommendations	Moved from Table C. The revised forest Plan will incorporate the Watershed Condition Framework (Appendix A10).

Table B. *Changes needed throughout the previous plan*

These needs for change are the first level of discretionary needs identified by the deciding official. They represent overarching general needs that were commonly, and in many cases overwhelmingly, identified through a combination of the assessments, public comments, tribal consultation, internal comments, or a combination of all of these means of seeking input for the revised forest plan.

Needed Change		Basis for Change	What we did with what we heard (internal and external)
B1	Revise the accessibility of the previous plan to the public, including incorporating current and changing technology and web-based tools to facilitate the diverse needs of the public	• Identification in public meetings	1996 Forest Plan, amendments and monitoring reports are now available on forest website.
B2	Re-evaluate the number, arrangement, and boundaries of Management Areas, and plan direction in the current forest plan management areas to minimize complexity and promote ecosystem integrity and connectivity	• Identification by the public and Forest Service staff	The Initial Proposal will include tiered geographic areas, management approaches, management areas, and desired conditions ranging from primitive to active management and related management discretion. (Appendix B2 – Map and Ecosystem Integrity)
B3	Revise the current plan to allow for more adaptive management to better meet and monitor desired conditions related to: • potential climate change effects • fluctuations in forest budgets, • using partnerhips, volunteers, and citizen scientists	• Identification by the public and Forest Service staff	The Initial Proposal includes three overarching Goals centered on: • Protecting and restoring watershed health, water resources, and the systems that rely on them; • Maintaining and restoring sustainable and resilient ecosystems; • Contributing to social and economic sustainability in the broader landscape and connect citizens to the land. (Appendix B4) The Revised Plan Monitoring Framework will be designed with partners, volunteers and citizen science in mind.
B4	Revise the current plan to include management approaches that consider local economies, markets, and partnership	• Identification by the public	This is a consideration and approach that will be carried throughout the development of plan components.

	opportunities as tools for meeting desired conditions		
B5	Revise the current plan to include management direction that ensures sustainable infrastructure related to recreation, forest health, and habitat connectivity	• 2012 Planning Rule • Identification by Forest Service staff	Considerations to be included in the analysis.

Table C. *Changes identified through the assessment phase*

These needs for change are the second level of discretionary needs identified by the deciding official. They may be considered due to clear gaps in the previous plan, or represent specific needs that were identified through a combination of the assessments, public comments, tribal consultation, internal comments, or a combination of all of these means of seeking input for the revised forest plan. At this time, the deciding official believes these needs for change are relevant, timely, and appropriate for evaluation as a proposed action in the environmental analysis phase of the revision process under the National Environmental Policy Act (NEPA phase).

	Identified Change	Basis for Change	What we did with what we heard (internal & external)
C1	Revise the current forest plan to allow for better integration, clearer direction, and more flexibility with regard to the use of prescribed and naturally occurring fire as a management tool and disturbance agent within the constraints of human health and safety	• Identification in Assessment 1, Ecosystem Integrity • Identification by the public	Plan direction language would be updated to comply with the Wild Fire Decision Support System. Direction should be adaptive in nature but fit with the area prescription and direction.
C2	Update the existing forest-wide air monitoring plan and 1994 Wilderness Air Quality Monitoring Plan reflecting current best management practices	• Identification in Assessment 2, Air, Soils, and Water Resources • Internal staff recommendations	The forest plan must include plan components related to air quality. All aspects of air quality monitoring will be updated in the analysis.
C3	Revise the previous plan and identify long-term priority watersheds to reflect the current best management practices including the Watershed Conservation Practices Handbook, National Best Management Practices program, and Watershed Condition Framework	• Identification in Assessments 1 and 2 • Internal staff recommendations • 2012 Planning Rule	Moved to A.
C4	Update the previous plan to incorporate the negotiated settlement language and decree between the Rio Grande National Forest and the State of Colorado (2000)	• Identification in Assessment 2 • Internal staff recommendations • Identification by the public	Incorporate the in-stream flow language in the desired condition and standard operating procedure. Incorporate objectives from agreement.
C5	Revise the previous plan to provide management direction for the Old Spanish National Historic Trail, including language from the Old Spanish National Historic Trail Comprehensive Management Plan	• Identification in Assessments 13 and 15 • Internal staff recommendations • Identification by the public	Old Spanish National Historic Trail and Cumbres and Toltec National Historic Landmark will be considered for special designations including any related non-FS direction.

	Identified Change	Basis for Change	What we did with what we heard (internal & external)
	when completed by the National Park Service; for the Continental Divide National Scenic Trail (CDT), including language from the 2009 CDT Comprehensive Plan; for the Sangre de Cristo National Heritage Area, Cumbres and Toltec National Historic Landmark; and for the Rio Grande del Norte National Monument.		The Sangre de Cristo Heritage Area was congressionally designated in 2009. It includes portions of forest in Conejos and Alamosa counties. Regional direction for the Continental Divide National Scenic Trail is in development.
C6	Evaluate additional areas for special designation, including areas with cultural values, ecosystem types known to be heavily fragmented, and areas important for the protection of plant communities and special habitats vulnerable to climate change. Evaluate additional protection of two critically significant areas, Mt. Blanca Massif and the Natural Arch, while maintaining motorized access.	• Identification in Assessments 12 and 15 • Internal staff recommendations • Identification by the public	After consultation with Federally recognized Tribes Mt. Blanca Massif and Natural Arch will be considered for special designation. Agency staff will investigate additional designations related to sensitive areas, key ecosystem characteristics tied to the viability of species of conservation concern and climate change vulnerabilities. Specific sites might include Lower Deadman Creek on the Baca Mountain Tract and snow willow habitat for the Uncompahgre fritillary butterfly.
C7	Revisit the size of the Fremont Special Interest Area	• Identification in Assessment 13 • Internal staff recommendations	Field archaeology work in 2015 confirmed the actual location of the Christmas Camp site. The revised forest plan will consider that field work.
C8	Update management direction to maintain separation between bighorn and domestic sheep. Address the need for management direction regarding recreational pack goats.	• Identification by a 2010 internal Conservation Assessment	Moved from D. The analysis will address Big Horn Sheep direction and concerns.

Table D. *Desired changes identified through the assessment phase*

These desires for change are the third level of discretionary needs considered by the deciding official. They represent specific needs that were identified through a combination of the assessments, public comments, tribal consultation, internal comments, or a combination of all of these means of seeking input for the revised forest plan. At this time, the deciding official believes these needs may be relevant, timely, and appropriate for further analysis in the NEPA phase. The deciding official, with public and interdisciplinary team involvement, will make a subsequent decision on whether to change this from a desire to a clear need for change. If it is decided to drop one or more of these desires from consideration after further analysis and subsequent decision, a clear rationale will be provided.

	Desired Change	Basis for Change	What we did with what we heard (internal & external)
D1	Update the definition and management direction for late successional/old growth forest and woodland communities	• Identification in Assessment 1 • Internal staff recommendations	Old growth is an ecosystem characteristic related to stages of late successional habitat. This will be updated and addressed in the discussion and analysis of ecosystem characteristics
D2	Revisit the oil and gas Leasing Available Analysis completed for the 1996 Forest Plan	• Identification in Assessment 10 • Identification by the public	The 1996 Forest Plan anticipated more activity that has been experienced. Suitability and leasing availability may be revisited when the Bureau of Land Management begins a new analysis. *** new technology discussion. Attach Appendix D2
D3	More efficiently manage wilderness areas across administrative boundaries with adjacent forests, and better incorporate the 1993 Colorado Wilderness Act and language specifically regarding Wheeler Geologic Area.	• Internal staff recommendations	Wilderness is currently administered across boundaries with adjacent units. Wheeler Geologic Area will be considered during the Wilderness Inventory, Evaluation, Analysis and Recommendation process or potentially considered for Special Designation in the forest plan. The 1996 Forest Plan contains management direction for the area.
D4	Contribute to developing and maintaining sustainable enterprises that contribute to the general economic and social vitality of the area.	• Identification in Assessments 6, 7, and 8, Social, Cultural, and Economic Resources and Ecosystem Services • Identification by the public	The role of the Forest Service is to actively contribute to social and economic sustainability in the broader landscape. This should be included in the overall goals for forest management. Management would focus on relationship maintenance and proactive management.
D5	Maintain the quality of visitor experiences while providing forest products and cultural and	• Identification in Assessments 6, 7, and 8 • Identification by the public	This will be addressed through analysis. Comments addressed the need to tie population .increases with impacts to the quality of recreational experiences.

	Desired Change	Basis for Change	What we did with what we heard (internal & external)
	recreational experiences to a greater number of people		
D6	Revisit how managing for multiple uses on the forest affects cultural resources	• Identification in Assessment 13, Cultural and Historic Resources • Identification by the public	Existing 1996 Forest Plan direction for cultural resource protection should be updated to incorporate more current manual and handbook direction.
D7	Evaluate additional protection of two critically significant areas, Mt. Blanca Massif and the Natural Arch, while maintaining motorized access	• Identification in Assessment 12, Tribal Resources • Tribal consultation	Combine with C6
D8	Additional management direction for recreational climbing in relation to peregrine falcon nests.	• Internal staff recommendations	Impacts should be addressed in a site specific analysis. Habitat and resource concerns can be mitigated through Forest Order.
D9	Update management direction to maintain separation between bighorn and domestic sheep	• Identification by a 2010 internal Conservation Assessment	Move to C
D10	Additional management direction regarding recreational pack goats on the Rio Grande National Forest	• Internal staff recommendations	Move to C and combined
D11	Revisit the stay limits on the Rio Grande in managed and dispersed campsites	• Internal staff recommendations	**Need IDT discussion- Rec assigned DNR input 30 days
D12	Revisit the Capacity Allocation Process related to special use permits	• Internal staff recommendations	**Need IDT discussion- Rec assigned

	Desired Change	Basis for Change	What we did with what we heard (internal & external)
D13	Revisit the off-road game retrieval policy on the Rio Grande National Forest	• Internal staff recommendations • Identification by the public	***Need IDT discussion, Wildlife assigned; CPW comments propose changed time, perhaps include in the travel management analysis
D14	Revise the communication sites identified in the current forest plan (and the approval policy), considering internal needs, potential changes in technology, and future needs of the public	• Identification in Assessment 11, Infrastructure • Internal staff recommendations • Identification by the public	Move to A.
D15	Address new technology, including the use of drones on the forest, as well as alternative energy sites and fiber optic	• Identification in Assessment 11, Infrastructure	***Need IDT discussion, coordinate with Safety/Fire
D16	Better access and management flexibility to maintain irrigation structures, such as dams and diversions, in wilderness areas	• Identification in Assessments 2 and 6	The Minimum Resource Design Guide is a tool for applicants to seek a waiver to conduct mechanized maintenance in wilderness areas. Prioritized maintenance schedules through regular consultation with line officers is encouraged.
D17	Update plan direction to protect and ensure legal access for public, private, and tribal needs in cases of fragmentation of forest lands	• Identification in Assessment 14, Land Status, Ownership, Use, and Access • Internal staff recommendations • Identification by the public	***Need IDT discussion
D18	Prioritize acquisition of inholdings appropriate for the management and continuity of forest land and collaborate more effectively with other private, state, and federal land owners of lands that border the Rio Grande National Forest	• Identification in Assessment 14, Land Status, Ownership, Use, and Access • Internal staff recommendations • Identification by the public	***Need IDT discussion

Desired Change		Basis for Change	What we did with what we heard (internal & external)
D19	Update plan direction for the removal of common mineral materials, such as commercial contracts, personal, ceremonial, and free use permits	• Identification in Assessment 10, Energy and Minerals • Internal staff recommendations • Identification by the public	***Need IDT discussion

Appendices

Appendix A2 – Forest Plan Revision Wilderness Recommendation Process

Rio Grande National Forest Plan Revision

Wilderness Recommendation Process

Step 1: Inventory of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System

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Introduction

The Rio Grande National Forest is in the process of revising the forest plan. The revision process includes identifying and evaluating lands that may be suitable for inclusion in the National Wilderness Preservation System (NWPS) and determining whether to recommend to the Chief of the Forest Service any such lands for wilderness designation. A description of this process can be found in the 2012 Forest Service Planning Rule and Chapter 70 of the Forest Service Land Management Planning Handbook 1909.12. This process includes the following four steps:

1. Identify and inventory all lands that may be suitable for inclusion in the National Wilderness Preservation System
2. Evaluate the wilderness characteristics of each area based on a given set of criteria
3. The Forest Supervisor will determine which areas to further analyze in the National Environmental Policy Act (NEPA) process
4. The Forest Supervisor will decide which areas, if any, to recommend for inclusion in the National Wilderness Preservation System (NWPS).

Lands evaluated and analyzed through this process and the resulting NEPA analysis are only preliminary administrative recommendations; Congress has reserved the authority to make final decisions on wilderness designation.

This report summarizes Step 1 of this process for the Rio Grande National Forest.

Step 1: Inventory of Lands that may be Suitable for Inclusion in the NWPS

The Rio Grande National Forest interdisciplinary team (please see Appendix C for a list of members) began identifying and inventorying lands that may be suitable for inclusion in the NWPS using the size, adjacency, and road improvements criteria outlined in the Forest Service Handbook.[1] The directives used to the complete Phase 1 Inventory were the draft directives, dated December 19, 2013.

Inventory Process and Criteria

1. Initial screening

- Private and state in-holdings were removed.
- FS Roads Maintenance Level 2 through 5 were buffered and removed.[2] **See FS Road Maintenance Definitions.**
- The 1996 Rio Grande National Forest Plan Utility Corridors were excluded from the inventory areas, as well as other known cleared rights-of-way and pipelines.

[1] See FSH 1909.12 Chapter 70, 71.21 and 71.22a

[2] A "snapshot" of the Rio Grande National Forest roads from xxxxx was used for the inventory.

2. Substantially Noticeable Features (See Appendix A for the Substantially Noticeable Definitions)

- Improvements that suggest substantially noticeable human activity in the area as a whole were removed.
- All tree removal activities from any year are considered substantially noticeable unless otherwise determined by specialist knowledge.[3]

3. Acreages of areas were then calculated and the following size classes are maintained:

- An area greater than 5,000 acres.
- An area adjacent to existing Wilderness regardless of size.
- A standalone area (not adjacent to existing Wilderness) that is less than 5,000 acres but of sufficient size to make practicable its preservation and use in an unimpaired condition and can be effectively managed as a separate unit of NWPS.

Lands shown on this preliminary inventory map do not imply designation or necessarily convey or require a particular kind of management, and inclusion or removal of any of these lands are open to discussion.

All unauthorized/user-created routes were included in the inventory because they are not part of the official road system. Those routes will be considered in the evaluation phase as part of the apparent naturalness and degree to which the area may be managed to preserve its wilderness characteristics.

Lands adjacent to development or activities that impact opportunities for solitude were included in the inventory. The fact that non-wilderness activities or uses can be seen or heard from within any portion of the area, must not, of itself, preclude inclusion in the inventory. It is appropriate to extend boundaries to the edges of development for purposes of inclusion in the inventory.

Public Collaboration

The Rio Grande National Forest hosted a series of collaborative workshops in June 2016 (see Appendix E). These workshops focused on the initial identification and inventory of lands that may be suitable for inclusion in the NWPS.

The public provided comments on the draft inventory results through an online collaborative mapping tool, hard copy comment forms, e-mail, and postal mail from June 1 – June 17, 2016. The Forest received a total of 10 comments during the comment period. Most comments did not provide specific comments on the draft inventory map. See Appendix B for a summary of the comments and how the inventory map was modified based on the comments.

[3] See Table 1 for inventory polygons with "not substantially noticeable" features.

Inventory Results

The resulting areas and acres are summarized in Table 1. Some overall results include the following:

- No stand-alone areas less than 5,000 acres were included because they were not of a sufficient size as to make practical its preservation and use in an unimpaired condition (from Criterion #3).
- Areas less than 5,000 acres in size were included because they are adjacent to an existing wilderness or recommended wilderness study area[4] (from Criterion #2).
- Forest-wide, 1,559,196.77 acres are included in the final wilderness inventory map.

Table 1. Wilderness Inventory Results

Inventory Polygon[5]	Ranger District	Size	Acres[6]	"Not substantially noticeable"
1.a	Conejos Peak	Wilderness Adjacent	6,481.89	
1.b	Conejos Peak	Wilderness Adjacent	27.73	
2	Saguache	Wilderness Adjacent	51,387.88	
3.a	Saguache	Wilderness Adjacent	1,219.14	
3.b	Saguache	Wilderness Adjacent	2,909.54	
3.c	Saguache	Wilderness Adjacent	402.01	
3.d	Saguache	Wilderness Adjacent	130.26	
3.e	Saguache	Wilderness Adjacent	4,021.95	
3.f	Saguache	Wilderness Adjacent	738.54	
3.g	Saguache	Wilderness Adjacent	383.55	
3.h	Saguache	Wilderness Adjacent	1,489.17	
3.i	Saguache	Wilderness Adjacent	3,462.08	
4	Saguache	Larger than 5K acres	25,663.84	1920s – 1940s shelterwood cuts
5	Saguache	Larger than 5K acres	8,223.73	1920s – 1940s shelterwood cuts
6	Saguache	Larger than 5K acres	53,803.51	
7	Saguache	Larger than 5K acres	9,273.69	
8	Saguache	Larger than 5K acres	9,210.56	
9	Saguache	Larger than 5K acres	16,792.56	
10	Saguache	Larger than 5K acres	19,605.94	

[4] Wilderness study areas are management areas on Bureau of Land Management federal lands.
[5] Numbering is not sequential due to adjustments during inventory process.
[6] All acres are approximate.

Inventory Polygon[5]	Ranger District	Size	Acres[6]	"Not substantially noticeable"
11	Saguache	Larger than 5K acres	10,290.71	
12	Saguache	Larger than 5K acres	49,276.00	
13	Saguache	Larger than 5K acres	17,220.38	
15	Saguache	Larger than 5K acres	25,541.44	
18	Saguache	Larger than 5K acres	9,877.84	
20.a	Saguache	Wilderness Adjacent	116,546.27	
20.b	Saguache and Divide	Wilderness Adjacent	57,220.13	
21	Saguache	Wilderness Adjacent	575.90	
22	Divide	Larger than 5K acres	16,770.88	
23	Divide	Larger than 5K acres	8,189.55	
24	Divide	Wilderness Adjacent	184.49	
25.a	Divide	Wilderness Adjacent	46,282.90	
25.b	Divide	Wilderness Adjacent	2,428.23	
26	Divide	Larger than 5K acres	112,833.95	
27	Divide	Larger than 5K acres	47,812.07	
28	Divide	Larger than 5K acres	102,716.88	
29	Divide	Wilderness Adjacent	10,198.60	
30.a	Divide	Wilderness Adjacent	30.91	
30.b	Divide	Wilderness Adjacent	8.06	
30.c	Divide	Wilderness Adjacent	27.10	
31	Divide	Wilderness Adjacent	221.18	
32	Divide	Wilderness Adjacent	191.47	
33	Divide	Wilderness Adjacent	1,531.97	
34	Divide	Wilderness Adjacent	417.72	
35	Divide	Wilderness Adjacent	2,895.51	
36.a	Divide	Wilderness Adjacent	9,620.32	
36.b	Divide	Wilderness Adjacent	4.14	
37.a	Divide	Larger than 5K acres	5,878.58	
37.b	Divide	Wilderness Adjacent	12,539.72	
38.a	Divide	Wilderness Adjacent	58,832.90	1925 shelterwood cut
38.b	Divide	Larger than 5K acres	10,363.64	
39	Divide	Larger than 5K acres	18,685.06	
40	Divide	Larger than 5K acres	17,838.25	

Inventory Polygon[5]	Ranger District	Size	Acres[6]	"Not substantially noticeable"
41	Divide	Larger than 5K acres	72,587.05	
42	Divide	Wilderness Adjacent	703.02	
43.a	Divide	Wilderness Adjacent	10,221.41	
43.b	Divide	Wilderness Adjacent	1,029.70	
44	Divide	Larger than 5K acres	19,003.29	
45.a	Divide	Larger than 5K acres	12,393.48	
45.b	Divide	Larger than 5K acres	21,900.14	
46	Divide	Larger than 5K acres	15,173.13	
49	Divide	Larger than 5K acres	12,089.18	
50	Divide	Larger than 5K acres	25,096.64	
51	Divide and Conejos Peak	Larger than 5K acres	123,836.95	
52	Conejos Peak	Larger than 5K acres	29,785.17	
53	Conejos Peak	Wilderness Adjacent	5,988.71	
54	Conejos Peak	Wilderness Adjacent	23.45	
55	Conejos Peak	Wilderness Adjacent	12,181.52	
56	Conejos Peak	Larger than 5K acres	19,075.14	
57	Conejos Peak	Wilderness Adjacent	8,646.54	
58.a	Conejos Peak	Wilderness Adjacent	91.29	
58.b	Conejos Peak	Wilderness Adjacent	5.20	
58.c	Conejos Peak	Wilderness Adjacent	12.41	
59	Conejos Peak	Larger than 5K acres	58,526.07	
60	Conejos Peak	Larger than 5K acres	8,790.80	
61	Conejos Peak	Wilderness Adjacent	2,457.53	
62	Conejos Peak	Larger than 5K acres	9,344.44	
63.a	Conejos Peak	Wilderness Adjacent	53,786.78	1970s single-tree selection cuts and precommercial thinning
63.b	Conejos Peak	Wilderness Adjacent	321.95	
63.c	Conejos Peak	Wilderness Adjacent	37.31	
64	Conejos Peak	Larger than 5K acres	40,961.39	1970s-1980s single-tree selection cuts
65	Conejos Peak	Carson Inventory adjacent	4,463.88	

Inventory Polygon[5]	Ranger District	Size	Acres[6]	"Not substantially noticeable"
66	Conejos Peak	Carson Inventory adjacent	2,382.85	

Next Steps

Evaluation

The next step in wilderness recommendation process is to evaluate each area on the inventory map for wilderness characteristics. Evaluation of wilderness characteristics is done using five criteria set forth in the Wilderness Act of 1964 and required in the Forest Service Handbook final directives FSH 1909.12, Chapter 70, Section 72.1. A summary of these five criteria is as follows:

1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable (apparent naturalness).
2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation. The word "or" means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.
3. Evaluate how an area of less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.
4. Evaluate the degree to which an area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. These values are not required in an area to be present, but their presence should be identified and evaluated where they exist.
5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

Over the next several months, each area of the inventory will be evaluated for these criteria based on direction from the FSH 1909. 12 Chapter 70. Supporting information that is identified during the evaluation phase will be used to evaluate and assess the area as a whole.

Analysis and Recommendation

Following the evaluation phase, the Forest Supervisor will decide, based on evaluation and public input, which areas, or portions thereof, will be considered in draft forest plan and alternatives. Comments will be used to make adjustments and prepare a draft environmental impact statement. This will tentatively be available for review in summer 2017. A draft record of decision and final environmental impact statement will occur in winter 2017 with the opportunity for objections.

Once the forest plan is finalized, the final environmental impact statement is released, and a record of decision is signed, the Rio Grande National Forest Supervisor may recommend suitable lands for National Wilderness Preservation System designation to the Chief of the U.S. Forest Service. Such recommendation may then be forwarded to the Secretary of Agriculture, and ultimately to Congress, for their consideration and possible designation. Congress has reserved

the authority to make final decisions on wilderness designation. Please see Appendix F for a detailed description of the process from evaluation through recommendation in Forest Service Land Management Planning Handbook 1909.12, Chapter 70.

Appendix A: Substantially Noticeable Definitions

The term "substantially noticeable" is not directly defined in the Forest Service Handbook 1909.12, Chapter 70 for inventory of lands that may be suitable for inclusion in the NWPS[7]. In February 2016, the Rio Grande National Forest interdisciplinary team developed a definition of 'substantially noticeable' for the specific improvements listed in the Forest Service Handbook[8]. The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole. An interdisciplinary team of resource specialists drafted the definitions of "substantially noticeable."

Assumptions Developed When Applying the Substantially Noticeable Definition Matrix

Linear Features

For linear improvements, such as fences or water pipelines, the determination for whether the improvement is substantially noticeable is not based on a person walking parallel to the feature with a continuous view of the improvement. Rather, the determination is based on a person potentially seeing the feature from different vantage points while traveling cross country in the area.

Structures

Structures, dwellings, and other relics of past occupation, when they are considered part of the historic and cultural landscape of the area, may be included in the inventory of lands that may be suitable for inclusion into the NWPS.[9]

Improvements Similar to Those Found in Existing Designated Wilderness

Substantially noticeable improvements occurring in existing wilderness on the Rio Grande National Forest do not influence the consideration of whether the same or similar improvement is substantially noticeable or not substantially noticeable using the final directives of FSH 1909.12 Chapter 70. The final FSH 1909.12 Chapter 70 directives and the Substantially Noticeable definitions will be used to determine if improvements are substantially noticeable. The fact that the same type of improvement may occur in designated wilderness will not influence whether an improvement within an inventory area is substantially noticeable or not substantially noticeable.

Applying Substantially Noticeable Definitions

The interdisciplinary team applied the Substantially Noticeable definitions during interdisciplinary meetings held between December 2015 and February 2016. The team reviewed each inventory area using the Substantially Noticeable definitions, corporate infrastructure data in Forest Service geodatabases, aerial photography. For those improvements for which there is no corporate record, local knowledge was applied if available.

[7] FSH 1909.12 Chapter 70, 71.22b
[8] FSH 1909.12 Chapter 70, 71.22b
[9] FSH 1909.12 Chapter 70, 71.22b #11

The following table includes the other improvements listed in FSH 1909.12 Chapter 70 and a matrix of improvements which are substantially noticeable.

Table 2. Substantially Noticeable Definition Table

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	**Substantially Noticeable Definitions**
Airstrips and Heliports	Not applicable.
Vegetation Treatments	Most vegetation treatments are substantially noticeable due to slow regrowth at high elevations. Treatments create deviations in form, line, color, texture and pattern in the surrounding natural landscape. Changes in canopy cover and forms introduced by treatment unit shape are evident and contrast with the surrounding natural landscape. Edges of treatment units are linear or abrupt. Concentrations of treatments may create an unnatural pattern across the landscape.
Timber Harvest Areas	Most timber harvest areas are substantially noticeable due to slow regrowth at high elevations. Treatments create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by vegetation treatment improvements. Changes in canopy cover and forms introduced by treatment unit shape are evident and contrast with the surrounding natural landscape. Edges of treatment units are linear or abrupt. Concentrations of treatments may create an unnatural pattern across the landscape.
Vertical Structures	Vertical structures associated with communications sites that create deviations in form, line, color, texture and pattern in the surrounding natural landscape and are substantially noticeable. Other vertical structures have minimal impact, including their maintenance and access requirements and are not substantially noticeable.
Areas of Mining Activity	Areas of mining activity where improvements create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by mining activity impacts. Improvements are not partially or completely screened by topography or vegetation from most vantage points. Historic mining activities are part of the cultural landscape and are not substantially noticeable.
Range improvement areas	Structural and non-structural improvements contrast with the form, line, color and texture of the surrounding landscape and/or structural improvements begin to dominate the setting are substantially noticeable. Ranching is part of the forest's cultural heritage, and range structures have become accepted as necessary parts of characteristic landscapes. Range structures such as fences, corrals and related structures, and water developments are generally not substantially noticeable unless they meet the following criteria:

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	**Substantially Noticeable Definitions**
Recreation Improvements	Per FSH 1909.12 Chapter 70: As a general rule, developed sites should not be included. Areas with minor, easily removable recreation developments may be included. Other recreation improvements such as dispersed campsites and outfitter-guide hunting camps are not substantially noticeable.
Utility Corridors/Linear Rights-of-way	Per FSH 1909.12 Chapter 70: Powerlines with cleared rights-of-way, pipelines, and other permanently installed linear right-of-way structures should not be included. Utility study corridor areas, underground pipelines and other linear features without cleared rights-of-ways are not substantially noticeable.
Watershed Treatment Areas	Watershed treatment areas where improvements create deviations in form, line, color, texture and pattern in the surrounding natural landscape are substantially noticeable. Examples include: • Improvements made of non-natural materials • Terraced areas • Post-fire treatments (i.e., filter dams) to control flooding, which are permanent and made of non-natural materials.

Appendix B: Public Comment Summary and Response

The following table summarizes comments received from individual and organizations via email, phone, written letter, or web-based map application.

Table 3. Public Comments and Changes to Inventory Map.

Commenter	Summary/Key Points	Changes to Inventory Map
Bernie Krystyniak	Supports additional wilderness designations in the Hinsdale County area of the forest. No specific comments on the draft inventory map.	N/A
Tom Sobel	Request for GIS data layers	N/A
Ardell Broadbent	General comments on support for public use of the national forest. No specific comments on the draft inventory map.	N/A
Rio Grande Watershed Emergency Action Coordination Team (RWEACT)	The criteria presented at the May 25, 2016, meeting in Del Norte appears to be more than sufficient for identifying land which should be included in the inventory of acreage which could then be considered as possible additions to Designated Wilderness. We have no additional criteria to suggest. In addition, the Rio Grande National Forest's team has done a very thorough job of identifying all of the acreage that fits the criteria and we feel there is nothing we could add to that remarkable effort. The process can move on to evaluation and assessment with confidence.	N/A
Trails Preservation Alliance and COHVCO	General comments on recognition that forest must conduct wilderness inventory, but do not support additional wilderness recommendations on the Rio Grande. No specific comments on the draft inventory map.	N/A
Mineral County Board of County Commissioners	Presence of man-made improvements (range improvements, motorized trails, historical mining, historical structures) in areas that are part of the wilderness inventory should exclude these areas from consideration as designated wilderness.	N/A

Commenter	Summary/Key Points	Changes to Inventory Map
	No specific comments on the draft inventory map.	
Jim Bazemore	General comments supporting the process as outlined during June 1 public meeting. Specific comments about the conditions and trends of grazing impacts in existing wilderness in the Assessment. No specific comments on the draft inventory map.	N/A
Intermountain Forest Association	General comments on recognition that forest must conduct wilderness inventory, but do not support additional wilderness recommendations on the Rio Grande. No specific comments on the draft inventory map.	N/A
Hinsdale County Board of County Commissioners	Do not support additional wilderness recommendations on the Rio Grande. No specific comments on the draft inventory map.	N/A
The Wilderness Society, Rocky Smith (independent consultant), San Luis Valley Ecosystem Council, Defenders of Wildlife, Quiet Use Coalition, Rocky Mountain Wild	Inventory criteria on web (story map) and criteria on hand out at public meeting are different.	N/A
	The roads criterion needs to be refined to better reflect the direction in section 71.22a of the Forest Service Handbook (FSH), and, in particular, the direction in subsections 71.22a(1)(b) and (c) that directs that areas with roads recommended for reclassification to Maintenance Level (ML) 1 or identified as "likely not needed" in the travel analysis should be included in the inventory.	Reviewed 2015 Travel Analysis recommendations and determined ML 2 roads "likely not needed" and ML 2

Commenter	Summary/Key Points	Changes to Inventory Map
	The 2015 Travel Analysis Report identifies: a) 48 ML 2 National Forest System road segments (totaling 56 miles) as "likely not needed"; and b) 272 ML 2 National Forest System road segments (totaling about 431 miles) for reclassification to ML 1.	roads identified for reclassification to ML 1 are already included in the wilderness inventory.
	To better reflect the handbook direction, the Forest Service can modify the online direction to say: "the inventory includes: a) blocks of lands 5,000 acres or larger; b) areas adjacent to existing wilderness, primitive areas, administratively recommended wilderness, or wilderness inventory of other Federal ownership regardless of size; and c) "A standalone area (not adjacent to existing Wilderness) that is less than 5,000 acres but of sufficient size to make practicable its preservation and use in an unimpaired condition."	N/A
	Regarding "excluded constructed features", we request that you describe what constitutes substantially noticeable vegetation management based on rational considerations and knowledge of field conditions.	N/A
	The first bullet under "substantially noticeable features" (on website) disqualifies improvements that "suggest substantially noticeable human activity in the area as a whole." While we agree with the concept that disqualifying improvements are those with impacts that appear substantially noticeable in the area as a whole, we request more detail about the types of features examined and the reasons for disqualification.	N/A
	The second bullet under "substantially noticeable features" disqualifies all tree removal activities from any year unless otherwise determined by specialist knowledge. This is a very broad disqualification statement that needs to have a more restrictive application.	The final wilderness inventory documentation will identify definitions for "substantially noticeable" features for all other improvements identified in FSH 1909.12 Ch. 70.
	We are concerned that the transportation data that was used to generate the polygons may not align with the data presented in the Travel Analysis Report and Motor Vehicle Use Maps. We ask that you double-check the accuracy of the transportation layer being used in the spatial analysis, and that you are correctly applying the data to the roads criteria described in FSH 1909.12, chapter 70, section 71.22(a).	N/A
	We believe that wilderness inventory polygon 15 improperly excludes the western part of the Sawlog Upper Tier Roadless area and adjacent lands in the Storm King Mountain area. The map depicts the eastern portion of NFS road 41G incorrectly. The map shows it located along the North Fork of Carnero Creek, and as such separating	Adjusted polygon 15 on inventory map as described in this comment.

Commenter	Summary/Key Points	Changes to Inventory Map
	the western area from wilderness polygon 15 to the east. Forest and County Road 41G actually follows the Middle Fork of Carnero Creek to the west, and that segment of road is accurately depicted on the map. The route incorrectly depicted on the wilderness inventory map as road 41 G along the North Fork of Carnero Creek is actually Forest Trail 773 (aka the North Carnero Trail, a hiking/horse trail), at least for the length of the 2.66 mile segment between the private land parcels. This trail extends north from Forest Road 680. Forest Road 680 in this corridor is a ML-1 closed road for 3.45 miles on USFS land (not including the .8 mile segment on private land) according to the "Rio Grande RoadsWithCoreAttibut" page on the 'Decommissioned Roads' spreadsheet available on the RGNF TAP page online at http://www.fs.usda.gov/detailfull/riogrande/landmanagement/projects/?cid=fseprd484850&wid th=full Given that ML-1 closed roads and trails are not supposed to exclude lands from the initial Wilderness Inventory, we believe that lands on both the east and west sides of Forest Trail 773 and the closed segment of FR 680 should be included in Wilderness inventory polygon 15.	

Appendix C: Team Members

The following table presents all persons associated with the project during the inventory process. Team members may be part of several teams listed.

Table 4. Team Members

Name	Affiliation & Title
Erin Minks	Forest Planner
Tom Malecek	Deputy Forest Supervisor
Judi Perez	Range, Soils, Water and Invasive Species Program Manager
Natalie Heberling	R2 Planning Team, GIS
Cheryl O'Brien	GIS
Tristram Post	District Ranger, Saguache
Lisa McClure	Wilderness Manager
Gerard Sandoval	Forestry Technician
Mike Blakeman	Public Affairs Officer
Andrea Jones	District Ranger – Conejos Peak
Martha Williamson	District Ranger - Divide
Kelly Garcia	Range Management Specialist
Rachel Franchina	Forest Service Enterprise Program, Recreation Planner

Appendix A3 – Forest Plan Revision Wild and Scenic Rivers Process Summary

Below is a table (Table 1) and short summary of the streams that will need to be evaluated during the Forest Plan revision process. Information from the full evaluation completed for the 1996 and updated information provided internally is included. Forest Service Handbook 1909.12, Chapter 80 Sections 82.61 and 82.62 were used to determine what stream segments were evaluated for the 1996 plan revision. An initial internal evaluation has determined that 25 segments may need to be evaluated. These, and an additional 9 segments that occur in the Baca Tract which was acquired after the 1996 evaluation and have not been evaluated entirely.

Table 1. Rio Grande National Forest Wild and Scenic River Evaluation - 2016

Number	Stream or River Name	District	Length (mi)	Potential miss 1996 / Baca Tract
1	Asiatic Creek	Conejos Peak	2.12	1996
2	Cat Creek	Conejos Peak	3.89	1996
3	Coal Creek	Conejos Peak	1.16	1996
4	Cropsy Creek	Conejos Peak	1.67	1996
5	East Fork Navajo River	Conejos Peak	0.87	1996
6	Jarosa Creek	Conejos Peak	0.60	1996
7	La Jara Creek	Conejos Peak	1.08	1996
8	Middle Zapata Creek	Conejos Peak	3.11	1996
9	North Fork South Zapata Creek	Conejos Peak	2.14	1996
10	San Luis Creek	Conejos Peak	2.13	1996
11	Bird Creek	Divide	1.94	1996
12	East Branch Pinos Creek	Divide	0.11	1996
13	East Willow Creek	Divide	8.73	1996
14	Middle Fork Pole Creek	Divide	3.37	1996
15	North Fork Pole Creek	Divide	1.95	1996
16	Flagstaff Creek	Saguache	2.22	1996
17	Little Red Creek	Saguache	1.31	1996
18	Masauernez Creek	Saguache	1.33	1996
19	Merkt Creek	Saguache	2.16	1996
20	Middle Fork Cotton Creek	Saguache	1.48	1996
21	Middle Fork North Crestone Creek	Saguache	2.11	1996
22	North Fork Cedar Creek	Saguache	1.31	1996
23	Peterson Creek	Saguache	3.14	1996
24	Rock Creek	Saguache	0.11	1996
25	South Fork Cedar Creek	Saguache	0.85	1996
26	Alpine Creek	Saguache	2.9*	Baca Tract
27	Cottonwood Creek	Saguache	2.8*	Baca Tract
28	Cedar Canyon / Cedar Spring	Saguache	2.6*	Baca Tract
29	Deadman Creek	Saguache	3.3*	Baca Tract
30	Pole Creek	Saguache	1.3*	Baca Tract
31	Short Creek	Saguache	1.5*	Baca Tract
32	Spanish Creek	Saguache	4.5*	Baca Tract
33	South Spanish Creek	Saguache	2.4*	Baca Tract

34	Willow Creek	Saguache	0.1*	Baca Tract

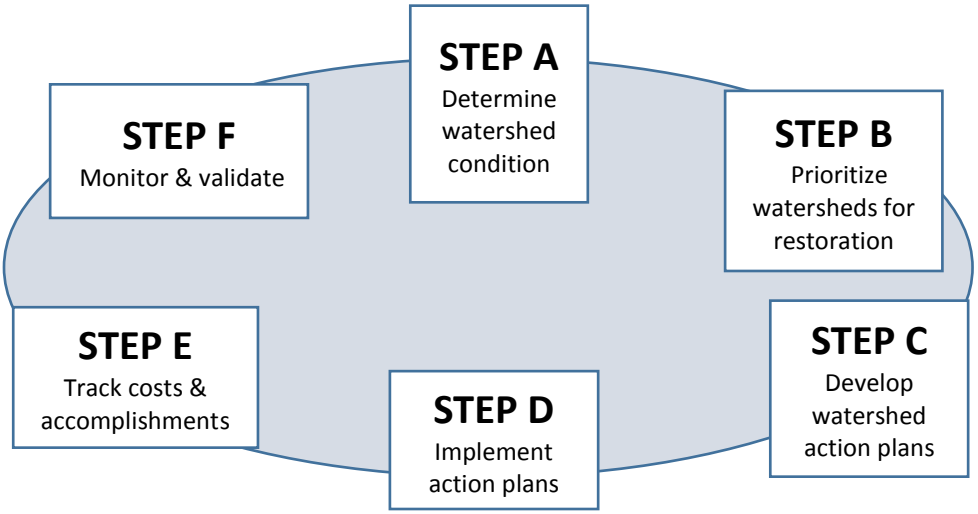
*initial estimate only, to be determined during analysis

Most of the Baca Tract streams originate in the Rio Grande National Forest that were evaluated originally, but the entire segments should be evaluates through the newly acquired land. An initial GIS evaluation determined the potential lengths of these nine segments, along with the 25 segments identified through this round's initial analysis. This amount to evaluation of 34 segments or approximately 72 miles of stream segments.

Appendix A10 - Implementation of the Watershed Condition Framework in Forest Plan Revision

In 2010, Forest staff was tasked with assessing all 6th-level watersheds forest-wide. These assessments were done using readily available data, local knowledge, and professional judgement. The assessments were assigned in October 2010 with a completion date of early 2011. The basic process was summarized in a letter to Forest staff in this manner:

Watershed Condition Framework 6-Step Process



Step A: Classify the condition of all of the 6th-level code watersheds on the Rio Grande National Forest using existing data layers, local knowledge, and professional judgment.

Step B: Prioritize watersheds for restoration based on ecological, economic, social considerations, partnership opportunities, and potential benefits.

Step C: Develop watershed action plans for the priority watersheds that identify the suite of essential project needed to change condition class and estimate costs.

Step D: Implement watershed action plans. A watershed is considered to have moved to an improved condition class when all of the essential projects identified in Step C are completed.

Step E: Project costs and watershed condition class will be tracked for both annual reporting and 5-year evaluations using the agency financial management and work plan software programs.

Step F: Monitor the effectiveness of treatment and assess if condition class was actually improved.

Watershed Condition Framework rankings can be adjusted annually as new, more accurate knowledge becomes available or when some event (fire, flood, and /or beetle infestation, etc.) changes the characteristics within a watershed such that the function of the watershed could be changed significantly. Additionally, every 5 years a forest-wide assessment is conducted to determine if any significant changes have occurred within each watershed and to determine a need for reassessment of a given watershed.

From the initial assessment, three watersheds were chosen as priority watersheds for closer analysis and to have Watershed Restoration Action Plans (WRAP) written to address restoration / protection of watershed resources needs. They are included in the following table.

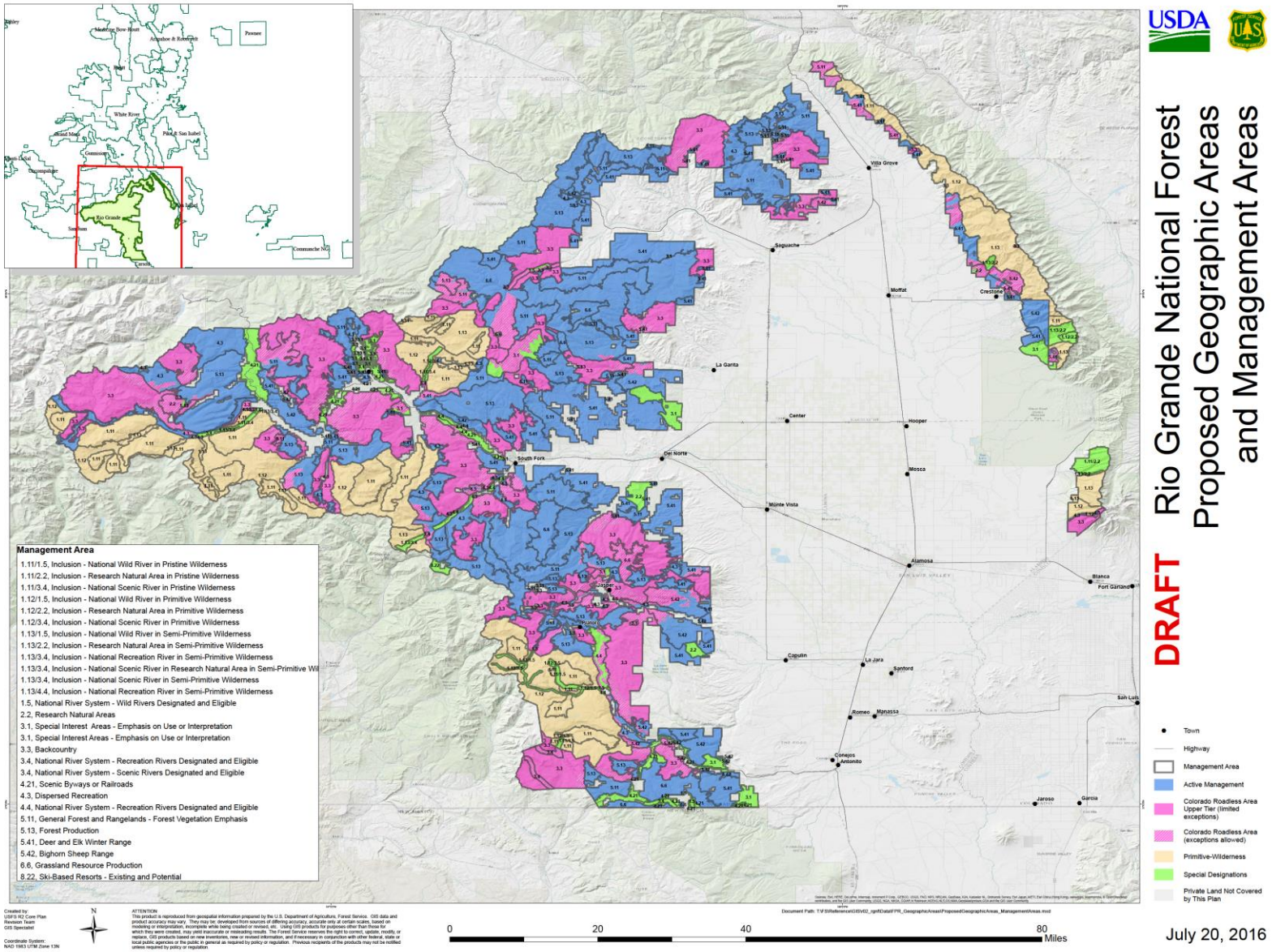
Table 1. *Priority watersheds 6th-level code and name*

Hydrologic Unit Code	*Watershed*
130100040401	Middle Fork Carnero Creek
130201020201	Headwaters of Rio Chama
130201020202	Archuleta Creek

Since the completion of the initial analysis some progress has been made to complete essential projects within these watersheds as money is available. A few watersheds were reassessed at the 5-year mark, in the spring of 2016, in response to landscape-level disturbance (beetle and fire) and acquisition of more knowledge about the watersheds conditions. As yet Forest staff has not completed a restoration plan for any of these watersheds.

Priority watershed has a specific meaning in the context of the Watershed Condition Framework. The 2012 planning rule requires the Forest Service to identify and designate priority watersheds.

Appendix B2 – Geographic Area Map



Appendix B2 – Summary of Terrestrial Ecosystem Integrity

Introduction

This report provides a summary of anticipated needs to change in the 1996 Rio Grande Forest Plan to address new requirements in the 2012 Planning Rule to "maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds within the Forest."

Ecological integrity is defined as "the quality or condition of an ecosystem when its dominant ecological characteristics (for example composition, structure, function, connectivity, and species composition and diversity) occur within the natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human influence." (36 CFR 219.19)

The Rio Grande Forest Plan Revision Assessment (Assessments 1 and 3 Ecosystem Integrity, Systems Drivers and Stressors for Terrestrial Ecosystems) lists the key characteristics which define ecosystems within the Forest:

- Diversity of vegetation – amount and distribution of vegetation structural stages
- Landscape disturbances and patterns
- Connectivity and fragmentation
- Late successional habitats
- Snags and down woody material
- Rare communities and special habitats

Terrestrial ecosystems within the Rio Grande National Forest include the following (approximate acres):

- Spruce-Fir Forest Mix (930,000 acres or 54 percent of the Forest) – Engelmann spruce, subalpine fir, quaking aspen
- Southern Rocky Mountain Montane-Subalpine Grassland (304,000 acres or 18 percent) – fescue, grasses
- Rocky Mountain Alpine Turf (192,000 acres or 11 percent) – grasses, sedges, sagebrush
- Pinyon-Juniper Woodland and low elevation grasslands (100,000 acres or 6 percent) – two needle pinyon, Rocky Mountain juniper
- Mixed Conifer – dry (95,000 acres or 5 percent) – Ponderosa pine most common
- Rocky Mountain Montane Riparian (62,000 acres or 4 percent) – riparian plants, willows, sedges
- Mixed Conifer – wet (43,000 acres or 2 percent) – Douglas fir most common
- Sagebrush Shrubland (5,000 acres) – bunchgrass, forbs
- Rocky Mountain Gambel Oak – Mixed Montane Shrubland (1,000 acres)
- Inter-Mountain Basins Greasewood Flat (100 acres)

The Rio Grande National Forest currently has 430,000 acres in Wilderness Areas. The forest also has an additional 518,620 acres in 53 different Colorado Roadless Areas. Together, these areas cover about 52% of the 1.83 million acres on the Rio Grande National Forest. There is also an additional 22,678 acres in Research Natural Areas. This half of the forest is highly protected with very little human impacts and a high degree of ecosystem integrity.

On the other half of the forest, there are many standard and guidelines in the amended forest plan that provide for the key ecosystem characteristics identified above. These were examined and led to the recommendations below.

Recommendations

Snags and down wood

There are standards in the current plan for retention of snags and down wood. These are sufficient and for the most part, the forest has well above the minimum amount recommended. The only exception is in the ponderosa pine forest type, where the current plan recommends a minimum of 3 14" snags per acre and 4-9 tons/acre of downed logs. Stand exam and Forest Inventory Analysis data suggest that the ponderosa pine forests aren't meeting these minimums. Assessment of the minimum retention amounts, especially for ponderosa pine, is recommended. Adding a minimum retention amount for pinyon-juniper forests should also be considered. Changes may also be needed due to the changed condition in the spruce-fir cover type to ensure future snag levels are sufficient.

Late-successional habitat

Currently only about 13% of the forest is in late-successional habitats. This is no surprise given the recent large-scale disturbances on the forest. We expect this to increase under current plan direction, but future predicted levels are still less than the historic estimates of late-successional habitat, and may be reduced as disturbances such as large fires and insect outbreaks increase in frequency due to climate change.

Based on monitoring reports, it is recommended that the definition and management strategy of late-successional habitat in the current plan be reviewed and modified to include estimates of current and desired amounts by ecosystem type.

Diversity of Vegetation

The assessment and published literature suggest that many ecosystems on the Rio Grande National Forest are within the range of natural variation. However, little is known about some of these ecosystems. The 2013 monitoring report echoes this – "Forested lands across the Forest are generally assumed to reflect composition, structure, and pattern with a natural range of variability as described in Appendix A of the Final Environmental Impact Statement for the 1996 Revised Land and Resource Management Plan."

Exceptions include the Dry Mixed-Conifer type. Given the more frequent fire regime of this type, it is generally thought to have been more impacted by fire suppression and thus more departed from historic conditions. Given that past management activities and disturbance events may have shifted species composition by removing the mature ponderosa pine, it is recommended that in this type, restoration efforts are continued to move this type towards a sustainable species composition and landscape pattern where fires can function in a desirable manner.

In the Wet Mixed Conifer type, modelling suggests that currently this ecosystem is highly departed from the natural range of variation. We believe this is due to recent fires and heavy spruce budworm mortality. It is recommended that this type in particular undergo further investigation.

Although there are many standards and guidelines related to the diversity of vegetation, the 1996 plan doesn't specifically describe the desired distribution of vegetation types and structural stages on the forest. One recommendation is to more fully describe the desired condition for each ecosystem type.

Landscape disturbance and processes

Current standards and guidelines regulate and limit the size of silvicultural openings. They also promote management of stands infected by insects or disease, aim to minimize the risk of spreading infestations, and encourage incorporation of insect and disease potential when planning management activities. Guidelines endorse the use of broadcast burning and suggest development and implementation of a

prescribed-fire program. One standard says to manage land treatments to limit the sum of severely burned and detrimentally compacted, eroded, and displaced land to no more than 15% of any land unit.

Some plan components focus on how management should emulate the pattern, timing, and frequency of natural disturbances. It is recommended these plan components be reviewed and clarified. There is a concern about whether or not this is always desirable and whether this is consistent with other plan components and direction, such as the Southern Rockies Lynx Amendment.

In addition, it is recommended that strategic fire management zones be incorporated into the forest plan to provide guidance on prescribed burning and allowing fires to burn for resource benefit.

Connectivity and Fragmentation

The current plan has some standards and guidelines related to connectivity and fragmentation. For instance, there is a forestwide objective to use existing roads, instead of constructing new ones and there are standards and guidelines about limiting connected disturbed areas, revegetation of temporary roads and travelways no longer needed, seasonal road closures, and restricting and limiting roads.

As discussed in the assessments, most terrestrial ecosystems are well protected within wilderness areas, roadless areas, and research natural areas and have low fragmentation due to roads, railroads, and private in-holdings. The exceptions to this are the Southern Rocky Mountain Montane-Subalpine Grasslands, Pinyon-Juniper Woodlands and Low Elevation Grasslands, and Rocky Mountain Montane Riparian. These 3 ecosystems were found to have the most fragmentation due to roads, railroads, and private in-holdings and have the least protection in wilderness areas, roadless areas, and research natural areas. It is recommended that extra protection and attention be given to these types as a result. In addition, given the dominance of the spruce-fir cover type on the forest and its changed conditions, connectivity in this type is important and should be investigated further.

It is also recommended that the idea of connectivity be more fully explored and better incorporated into plan components and direction. In essence, connectivity on the Rio Grande National Forest is still a knowledge gap.

Rare communities and special habitats

Rio Grande National Forest personnel are still considering how best to proceed on the management of rare communities and special habitats. Some recommendations include the consolidation of plan direction on rare communities and special habitats given that it is currently dispersed throughout the plan. It is also recommended that the high diversity potential conservation areas discussed in Assessment 1 be investigated further as possible designated areas.

Other Recommendations

It is also recommended that current plan components be reviewed and updated individually for clarity. They may need to be updated so that they better fit the definition of a desired condition, objective, standard, or guideline. All plan components should be reviewed to ensure they comply with the criteria in the 2012 planning rule.

In addition, there is a need to change some plan components simply due to difficulty or infeasibility of implementation.

Appendix B4 – Overarching Forest Plan Goals

Protect and restore watershed health, water resources, and the systems that rely on them

National forests that exist today were initially created under the guidance of the National Forest Reserve Act of 1891. The Act allowed the President of the United States to set aside forest reserves from the land in the public domain. This Act provided for wise use of the lands that would provide protection of timber at the headwaters of streams and reduce downstream flooding and provide water for irrigation in the West all summer[10]. Protecting and restoring watershed health reaffirms the Act that initiated the national forests of today.

Opportunities would be provided to emphasize collaborative stewardship of watersheds and interrelated biological, economic, and social factors that affect these areas. Heathy and functioning watersheds contribute to overall resource health.

Maintain and restore sustainable, resilient ecosystems

Ecosystems are a barometer of the quality of land management practices. A natural variety of species, genetic composition, and ecological processes are key to providing the diversity needed to be resilient in the face of environmental disturbances and changes.

Aggressively diversifying age classes and structure, seral stage, and habitat classes in the next planning horizon would provide many benefits including but not limited to providing connectivity, responsiveness to anticipated changes in climate, ecosystem services, recreation, increased social and economic benefits, and more.

Actively contribute to social and economic sustainability in the broader landscape and connect citizens to the land

The Rio Grande National Forest would continue to contribute forest products and tourism opportunities that are important to local economies and provide ecosystem services for current and future generations.

We would maintain places where human influence is limited as well as protect religious, Tribal, and culturally significant areas.

Opportunities would be available for individuals, partners, and organizations to be active participants in managing, monitoring, and implementing projects that achieve integrated resource management.

[10] Early Administration of the Forest Reserve Act: Interior Department and General Land Office Policies, 1891-1897, James Muhn, http://www.foresthistory.org/Publications/Books/Origins_National_Forests/sec17.htm).